



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET S.W
ATLANTA, GEORGIA 30303-8960

SENT VIA ELECTRONIC MAIL

Ms. Lana Brown
Environmental Compliance Manager
Hopkins County Regional Landfill
419 Claude Young Road
White Plains, Kentucky 42464
lanab@wasteconnections.com

Dear Ms. Brown,

Enclosed is a copy of the final report generated by the U.S. Environmental Protection Agency's Region 4 Air Enforcement Branch for the inspection conducted at Hopkins County Regional Landfill in White Plains, Kentucky, on July 27 and 28, 2022.

Should you have questions regarding this inspection report, contact me at (404) 562-9030, or by email at mills.andrew@epa.gov.

Sincerely,

Andrew Mills
Environmental Engineer
Air Enforcement Branch

cc: Jarrod Bell,
Field Operations Branch Manager
jarrod.bell@ky.gov

**United States Environmental Protection Agency (EPA) Region 4
Air Enforcement Branch**

I. GENERAL INFORMATION

Facility Name: Hopkins County Regional Landfill

Location (Address): 419 Claude Young Road
White Plains, KY 42464

Inspection Date: July 27 and 28, 2022

Type of Inspection (Full or Partial Compliance Evaluation):
Partial Compliance Evaluation

ICIS-Air Number: KY0000002110700155

EPA Inspectors:

1. Andrew Mills, Environmental Engineer
2. David Lloyd, Environmental Scientist
3. Brian Zhong, Environmental Engineer

State Inspectors:

1. Lori Blaire, Environmental Scientist
2. Mac Cann, Environmental Control Supervisor

Persons Contacted at Facility:

1. Lana Brown, Environmental Compliance Manager
2. Ross Fitzgerald, Landfill Gas Technician

Report Prepared by: Andrew Mills

II. FACILITY INFORMATION

A. Facility and Permit Information

Facility and Permit Information	Comments
1. Type of facility (e.g., chemical plant, refinery, cement manufacturer, etc.).	Municipal Solid Waste Landfill
2. Air permit number(s) and type of permit (e.g., Title V, PSD, Synthetic Minor, etc.).	Title V Operating Permit No. V-18-053
3. Air permit issuance date.	October 20, 2020
4. Air permit expiration date.	October 20, 2025
5. Facility classification (Major, Synthetic Minor/Conditional Major, Minor).	Major
6. Major source pollutants (if applicable).	Particulate Matter (PM) Sulfur Dioxide (SO ₂) Nitrogen Oxides (NO _x) Carbon Monoxide (CO) Hazardous Air Pollutants (HAPs)
7. Applicable regulations (e.g., State Implementation Plan, MACT Subpart FFFF, NSPS Subpart EEEE, etc.).	40 C.F.R. Part 63 Subpart AAAA MACT - Municipal Solid Waste Landfills 40 C.F.R. 61 Subpart M National Emission Standard for Asbestos 40 C.F.R. Part 62 Subpart OOO Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and

	Have Not Been Modified or Reconstructed Since July 17, 2014
8. Types of air emission points (e.g., tanks, process vents, boilers, etc.).	Voluntary Gas Collection and Control System (GCCS)
9. Types of air pollution control equipment (e.g., baghouse, scrubber, afterburner, etc.).	Gas generated from the decomposition of waste is sent to a candlestick flare for combustion.

B. Process Description

Hopkins County Regional Landfill (HCRL) located in Hopkins County, Kentucky is primarily a municipal solid waste landfill that commenced construction, reconstruction or modification on or before July 17, 2014, and has a design capacity greater than 2.5 million cubic meters by volume. As of the most recent Tier 2 Test report dated March 13, 2022, this landfill has a calculated non-methane organic compound (NMOC) emission rate of 5.81 Mg/yr which falls below the 34 Mg/yr threshold. The existing voluntary GCCS was installed 2011.

The landfill consists of Unit 1, which accepted waste from 2005 until the present, Unit 2, which accepted waste from 2014 until the present, Unit 3, which accepted waste from 2021 to present, and Unit 4, which has not begun accepting waste yet and has not been constructed at this time. Final cap has not been placed on any part of the landfill. The source includes a landfill and associated equipment including a GCCS, flare, fuel (gasoline and diesel) tanks, haul roads, site construction, leachate storage tanks, and an industrial liquid waste solidification permit and solidification pit (pit has not been utilized in the prior 4 years).

III. INSPECTION ACTIVITIES

Activity	Yes	Comment
	No	
	NA	
Opening Meeting		
1. Date and time entered the facility.	Y	EPA Region 4 (R4) inspectors arrived at the facility on July 27, 2022, at 9:20 AM (CDT).

2. Credentials presented to facility personnel (include name and title).	Y	All inspectors presented their credentials to Lana Brown, Environmental Compliance Manager and Ross Fitzgerald, Landfill Gas Technician
3. Conducted an opening meeting to explain the purpose and objectives of the inspection.	Y	Inspectors held an opening meeting with the HCRL personnel during which the purpose and objectives of the inspection were explained.
4. Discussed safety issues.	Y	Inspectors discussed facility-specific safety and emergency procedures, including procedures for COVID-19 safety during the inspection.
5. Discussed which records to be reviewed.	Y	Records requested during the inspection were emailed from the facility after the inspection concluded. See Attachment A
6. Discussed the facility walk-through and the areas to be observed in the facility.	Y	Inspectors discussed the overall inspection plan, which included looking at the flare and monitoring ground level methane around the perimeter, at well heads, at leachate sumps, and across the surface of the landfill.
7. Discussed facility policy regarding photographs or video (if applicable).	Y	R4 inspectors discussed facility policy regarding photography and videography. Inspectors indicated that copies of any videos or photographs taken at the facility would be sent to the company. A log of photographs taken at the facility is included in this report. See Attachment B.
8. Discussed the use of the infrared camera, TVA, PID, and any other equipment.	Y	EPA inspectors communicated the use of the infrared camera, the toxic vapor analyzer (TVA), and GPS for location identification.

9. Discussed CBI.	Y	EPA inspectors indicated that any material claimed to be Confidential Business Information (CBI) would be treated in accordance with regulations.
Records Reviewed at the Facility		
10. The types of records reviewed, and the time period reviewed.	Y	Records were requested during the inspection, but due to time constraints, the records were emailed from the facility after the inspection concluded. See Attachment A
Facility Walk-Through Observations		
11. The process equipment observed, and the associated operational rate observed.	Y	R4 inspectors safely observed cells of the landfill, the leachate sumps, gas collection wells and the flare.
12. The type of process parametric monitoring observed and the associated value.	N/A	
13. If process equipment or parametric monitoring equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	
14. The type of air pollution control equipment, the process equipment it is controlling, and the associated parametric monitoring value observed.	Y	Waste gas generated from the decomposition of waste in the landfill is collected by a GCCS. The waste gas is sent to an enclosed flare for destruction. At the time of the inspection, the flare was operating and was observed using the infrared camera.

15. Continuous emissions monitoring devices and values observed. (e.g., CEMS, COMs, etc.).	N/A	
16. If air pollution control equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	
17. Capture and collection system (enclosures and hoods) observations, if applicable (e.g., the magnitude and duration of emission escaping capture from the hood).	Y	Waste gas generated from the decomposition of waste in the landfill is collected by a GCCS. During the inspection, there were recorded instances of leaks and emissions using both the infrared camera and the TVA. See Attachments B and C
18. Ductwork transferring the emissions to the air pollution control device observations, if applicable (e.g., the magnitude and duration of emission escaping from the ductwork, holes or deterioration in ductwork, no deterioration observed, etc.).	N/A	
19. Any existing unpermitted emission points, new unpermitted emission points, or non-permitted construction activities observed. (if yes, describe in the comments field).	N	

20. Were any visible emissions observed? (if yes, identify the location and equipment).	N	There were no emissions which were visible to the naked eye. However, the emissions that were observed were volatile organic emissions which are not normally detectable by sight but were observed using the TVA and/or the infrared camera. See Attachments B and C
21. Was a Method 9 reading performed? (if yes, identify the location and equipment).	N	
22. Was the cause of the visible emissions investigated and the information documented?	N/A	
23. Was a Method 22 performed for visible emissions? (if yes, identify the location and equipment).	N/A	
24. Identify the cause of the visible emissions as explained by facility personnel, if applicable.	N/A	
25. Was the infrared camera used? If so, attach the video log (which includes the equipment ID, and the date and time the video was recorded) and videos to this report.	Y	See Video Log, Attachment B
26. Was the TVA used? If so, identify the equipment monitored and the results.	Y	On November 28, 2021, HCRL was approved for the use of an alternative procedure for calculating the NMOC by the U.S.

		<p>Environmental Protection Agency. As part of the conditions for the alternative procedure, HCRL was required to implement a quarterly monitoring program to demonstrate that the surface methane concentration at the facility is less than 500 parts per million (ppm).</p> <p>HCRL had conducted two quarters of surface monitoring in 2022. Zero readings above the 500 ppm threshold were noted at both monitoring events.</p> <p>During the inspection, approximately 70 distinct instances of ground methane levels above 500 ppm were recorded at the landfill using the TVA. Elevated readings were noted at multiple cover penetrations, areas with distressed vegetation, and areas where surface erosion had taken place.</p> <p>See TVA Reading Log, Attachment C</p>
27. Was the PID used? If so, identify how the PID was used and the results.	N	
Closing Meeting		
28. Conducted a closing meeting.	Y	R4 inspectors conducted a closing meeting on July 28, 2022, at 3:45 PM CDT with the facility personnel and KYDAQ inspectors.
29. Summarize any additional information needed, if applicable?	Y	The facility was informed of EPA's ability to use Clean Air Act (CAA) section 114 authority to request additional records at a future date if needed.

30. Accept a declaration of CBI, if applicable?	N	Although the CBI procedures were explained in the opening meeting and at the start of the inspection, a CBI declaration was not made at the time of the inspection. The facility was advised that an inspection report and all recorded videos and pictures would be sent to them for a CBI review following the inspection.
31. Discussed observations.	Y	Inspectors thanked facility personnel for their time and summarized inspection activities. R4 inspectors discussed the observations made during the inspection. This included the specific areas of elevated TVA readings and/or infrared video recordings at the extraction well sites, leachate collection sump areas, leachate tanks, and the emissions recorded along the surface of the landfill cover.
32. Discussed next steps, if applicable?	Y	The R4 inspectors stated that an inspection report and the submission of all recorded videos and pictures would be the next step in the process.
33. Date and time inspection concluded.	Y	The inspection concluded on July 28, 2022 at approximately 4:15 CDT.
Miscellaneous		
34. Include any additional observations, if applicable.	N/A	

EPA Investigator/Inspector Signature: _____

EPA Supervisor Signature & Title: _____

Chief, North Air Enforcement Section

Date Report Finalized: September 28, 2022

Attachment A Records Emailed to EPA

1. Continuous flare data for 7/27/22 and 7/28/22